

My Stomach Hurts! Strategies for the Nurse in Assessing and Managing Common Gastrointestinal Complaints in the School-Aged Population.

Peggy Pelish, PhD, APRN-NP
UNMC College of Nursing

1

Objectives

- Describe the most common gastrointestinal disorders in the pediatric population.
- Describe an assessment framework for the school nurse in addressing GI complaints at school.
- Describe management approaches for: Chronic constipation, chronic stomach ache, and bowel incontinence

2

Child GI pathophysiology

- US children have highly processed diet without fruits/vegs/fiber
- Affected by illness, injury, stress
- Viral effects can last 10 days
- Genetic/familial conditions in early infancy
- Acute conditions more in school-age (appendicitis, torsions)
- Pain from mechanical or chemical stimuli

3

Frequency of disorders: Chronic constipation

- Delay or difficult defecation
 - defined as 2 weeks or longer
 - 3-5% of Pediatric visits
 - 1-30% of children
 - Peak at preschool age

4

Types

- Functional – no evidence of anatomic or biochemical cause
 - Most are idiopathic, dietary or pain induced
- Organic – less than 5% which have an anatomic, metabolic or neurologic problem
 - Consider drugs (antacids, opioids, phenobarb)

5

Physiological Causes

- Cow's milk intolerance
- Low dietary fiber
- Deficient fluid intake
 - Influenced by fever and hot weather
- Immobility – neuro disorders
- Anorexia Nervosa
- Starvation

6

Organic signs

- Delayed growth
- Urinary incontinence or bladder disease
- Passage of blood
- Extraintestinal symptoms
 - Fever, vomiting or diarrhea
 - Chills

7

Chronic stomach ache

- Chronic stomach ache – pain for at least 3 months
 - 9-15% of school age
 - Peaks at 4-6 yrs and adolescence
 - Males more at 5-6 yrs
 - Females more at 5-6 yrs and 9-10 yrs
 - Organic (10-15%) or Functional
 - Affects activities (1/4th miss 1 out of every 10 days of school)

8

Organic stomach ache

- Structural or biochemical causes
 - Constipation
 - Malabsorption
 - Musculoskeletal pain
 - Parasites
 - Dysmenorrhea
 - Peptic disorders
 - Also: UTI, Inflammatory bowel, PID

9

Functional stomach ache

- No cause found or combination of symptoms
 - Irritable bowel
 - Functional abdominal pain (formerly called recurrent abdominal pain RAP)

10

Bowel incontinence - encopresis

- Child avoids defecation with stool accumulation and hardening
- Rectal distention, anal canal shortens
- Internal sphincter dilates, external relaxes and there is stool leakage around hard mass
- Noticeable odor
- More males

11

Causes of stool holding

- Painful defecation
 - Anal fissure
 - Perianal irritation
 - Sexual abuse
 - Hemorrhoids
- Intentional
 - environment (privacy, cleanliness), stress
- Emotional disturbance
- Mental retardation
- Depression

12



13

Assessment framework - OLDCART

- Onset
- Location
- Duration
- Characteristics
- Aggravating factors
- Referred pain (radiates)
- Treatment tried (did it work)

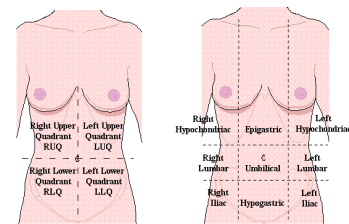
14

Onset

- Sudden – body response to twisting or bacteria
- Gradual – viral or slow condition
- Chronic – daily occurrence could be linked with psychological factors
- Sporadic – linked with school versus home

15

Location



16

Characteristics

- Type of pain
 - Sharp/stabbing – localized effect of area infected or twisting
 - Dull – generalized
 - Cramping – active peristalsis, ovarian effect, allergic response, gastroenteritis
- Vomiting
- BM – diarrhea or constipation
- Flatulence
- Heartburn

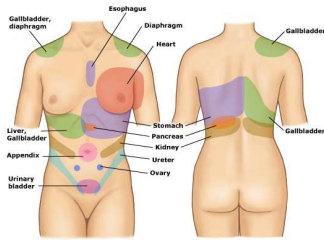
17

Aggravating factors

- Food adds to pain
- Movement – bending
- Deep breath
- Environment

18

Referred pain – moves to shared dermatome



19

Treatment tried

- Does defecating help (helps in Inflammatory Bowel Syndrome)
- Heat can comfort but must be watched
- Peppermint to relax sphincter
- Hot drink can relax

20

General Assessments

- Auscultation- 5-20 sounds/minute
- Check Hydration
- Assess for visible peristalsis, rashes, lesions, asymmetry
- Palpate for masses or rebound tenderness
- Pain assessment scales (FACES)
- Weight loss is a concern

21

General treatment

- Fluids – sips of water
- Private toilet time (remind to wash hands)
- Avoid scolding for complaints

22

Conditions

- Chronic constipation
- Chronic stomach ache
- Bowel incontinence (Encopresis)

23

Signs of Chronic constipation

- Vague complaints of abdominal pain
- Increase after warm drinks

24

Assessment of Chronic Constipation

- Decreased bowel sounds
- “Full” abdomen on palpation
- Passing gas
- No fever

25

Management of chronic constipation

- Toileting time – quiet, private, 5-30 min after meals (do they need a stool for feet?)
- Warm drink & increase fluids
- Fiber diet
- Home management including Miralax daily until regular

26

Chronic constipation hints from you?

27

Chronic Stomach Pain

- Signs – regular, dull, periumbilical
- Can be related to class or activity
- Occurs at least monthly for > 3 months

28

Chronic Stomach Pain Assessment

- No palpable masses
- Normal bowel sounds
- Unrelated to meals or stool passage
- May see pallor, nausea, dizziness, headache or fatigue

29

Psychosocial Assessment

- School issues
 - Course work
 - Gym class
 - Bully
- Home issues
 - Dysfunctional family
 - Stress of home
 - Abuse

30

Management of Chronic Stomach Ache

- Rest
- Peppermint relaxation of sphincter
- Pain diary – time, severity, location, activity & remedy
- Biofeedback & relaxation
- Consider a mild food intolerance
- Antispasmodics considered

31

Hints on Chronic Stomach Pain from you?

32

Bowel Incontinence - Encopresis

- Smearing of stool leads to odor
- Complaint of vague abdominal pain
- Self-esteem issues

33

Encopresis assessment

- Decreased bowel sounds
- Full abdomen on palpation
- Odor

34

Encopresis Program

- Laxatives
- Behavioral management
- Diet changes
- Follow-up

35

Encopresis goal

- Rebuild rectal muscles to control stools
- One soft stool per day or every other
- 30-50% success in 1 year
- 48-75% success in 5 years

36

Encopresis home care

- Polyethylene Glycol (Miralax) used most
 - Other options: Mineral oil, magnesium hydroxide (MOM) or magnesium citrate, bisacodyl
- 2-4 tsp with fluid daily
- ↑ by 1-2 tsp q 2-3 days
- Add fiber and fluids, follow-up
- After 6-8 wks of daily stool, ↓ ½ - 1 tsp q 2 wks
- If harden again, ↑ slightly & retry in 6-8 wks

37

Encopresis management

- Toileting – quiet and privacy for 5-10 minutes after meals
- Esteem issue of cleanliness – spare clothes
- Reward system for toilet time and meds
- Fiber – whole grains, fruits & vegetables
- Fluids – 32-64 oz day (non-milk)

38

Fiber supplements – 1-3 times a day

- Metamucil – (6-12 yrs) ½ - 1 tsp or ½ Tbs depending on concentration
- Benefiber – (7-11 yrs) ½ - 1 Tbs
- Citrucel – (6-12 yrs) ½ Tbs

39

Hints for encopresis from you

40

Acute Abdomen signs

- Sudden pain
- Some relief with rest
- Fever - check throat for redness
- Tachycardia
- Pain in left lower quadrant – rebound
- Pain with movement of hip

41

Management of acute abdomen

- Parental contact
- Evaluation

42



43

Case

- 10 year old Tommy comes to office with stomach ache. He is bent over and points to his belly button. He tells you that it helps when he rests. He denies any diarrhea, nausea or vomiting. He says he was fine this morning. His abdominal exam is negative with bowel sounds present. No masses palpated or visible.

44

He had oatmeal with milk for breakfast. He has come to you just before gym class.

What do you do next?

45

Care

- Rest
- Fluids
- Use of bathroom
- Reassess again and inform him of the time
- If abdominal pain improves, assume stress or possible milk intolerance. Would want to notify parents if persists or worsens.

46

Questions and comments



47